

ABSTRACT OF THE DISCLOSURE

A synthetic RNA catalyst capable of cleaving an RNA substrate, the catalyst comprising a substrate binding portion and a "hairpin" portion. The invention also provides an engineered DNA molecule and a vector, each comprising a DNA sequence coding for an RNA catalyst according to the invention. The invention further comprises host cells transformed with the vectors of the invention which are capable of expressing the RNA catalyst. Finally, the invention provides a method of cleaving an RNA substrate which comprises contacting the substrate with a synthetic RNA catalyst according to the invention.